

## **REMARKS**

In response to the Office Action dated February 26, 2007, Applicant gratefully acknowledges the indicated allowability of claims 5 and 9 but otherwise traverses the rejection of claims 1-4, 6-8, and 10.

The Examiner objects to the form of claims 5, 6, and 7, because of multiple dependency. This was eliminated in a preliminary amendment filed March 7, 2005. It is believed that the claims are in proper form for consideration.

With respect to the rejection of claims 1 and 8 under 35 USC §102(b) over Schawe, this rejection is respectfully traversed.

The present invention, as reflected in independent claims 1 and 8, is directed toward determining the phase transition of a substance in which the test equipment is located. The present invention is particularly designed to test environmental conditions such as dew point, relative humidity, or the like. Differences in heat flow from two adjacent test surfaces employing phase shifted and non-phase shifted heating signals are employed for this purpose.

The primary reference, Schawe, on the other hand, is not directed to environmental testing but is directed to testing equipment for determining the properties of a test material or sample by comparing the properties of that material with a control material that receives the same thermal test signal. Schawe does not test for environmental conditions and does not use two phase shifted signals for testing the same sample. Instead, it measures the characteristics of the test substance and compares them with a control substance. This is completely different from the process and product claimed in the present application. It is therefore urged that Schawe be withdrawn as a reference.

Since Schawe is not relevant, the same holds true for the other patents cited against the depend claims in the subject office action, Hutter Patent No. 6,318,890, and Sahm Patent No. 6,192,697. Neither of these references supplies the deficiencies noted in Schawe, and these references, alone or in combination with Schawe, do not disclose the present invention.

In addition, Hutter is not relevant for other reasons. For example, the Examiner refers to the "two opposing surfaces 1" in FIG. 1 of Hutter, indicating that these correspond to the "first surface" and "the second surface" as recited in claim 2 of the present application. However, reference numeral 1 in FIG. 1 of Hutter refers to the wall of the cylindrical oven block and in view of the wound heating wire around this wall 1, there can be no "varying a temperature of a first substance "and" varying a temperature of a second surface, which varying is phase-shifted in relation to the varying of the temperature of the first surface" in the sense of claim 2 of the present application.

An Information Disclosure Statement is also submitted with the present response. This identifies Rall, et al. European Patent Application 92402305.4, Hoenk Patent No. 5,739,416 and McBair Patent No. 2,720,107. None of these references is believed to disclose the present application as claimed.

In view of the foregoing, it is urged that all of the claims of the present application are in condition for allowance, and such action is respectfully solicited.

Respectfully submitted,

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Dated: \_\_07/26/2007\_\_ By\_\_\_\_/John A. Waters/\_\_\_\_\_

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